

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 11, line 21 and ending on page 11, line 25 as follows:

--Figure 2 depicts a preferred embodiment of the present invention, a five layer unit (20). The five layer unit (20) may, for example, be used for a fuel cell or oxygen generator. The five layer unit (20), comprises two interconnect layers (70A, 70B), and a trilayer core (10). The trilayer core (10) comprises an anode layer (40), an electrolyte layer (50), and a cathode layer (60).--

Please insert the following paragraph beginning on page 14, after line 2 and 10 before page 14, line 3:

--In the trilayer core (10) of Figure 2, the anode (40) is shown with a first anode face (40A), a second anode face (40B), and an anode edge (40C). The electrolyte layer (50) interfaces with the anode (40) at the second anode face (40B) and anode edge (40C). An electrolyte edge surface (50D) is the outer edge surface formed where the electrolyte 15 layer surrounds the anode edge (40C). The cathode layer (60) interfaces with the electrolyte (50) over a first portion of electrolyte surface (50B), leaving a second portion of electrolyte surface (50C) exposed, as shown. The cathode layer (60) is also shown with a cathode face (60B) and a cathode edge (60C).--

Please amend the two paragraphs beginning on page 14, line 3 and ending on 20 page 14, line 11 as follows:

--The interconnect layers (70A, 70B) may comprise a metal, alloy, or other electrical conductor. In the present invention, the preferred material is a ferritic steel alloy that resists oxidation at operating temperatures and has a coefficient of thermal expansion similar to the other fuel cell materials.

The interconnect layers (70A, 70B) may be deposited using thermal spray techniques, or any other technique which will connect the interconnect layers to the trilayer core, thermal spraying being the preferred technique. The deposition of the interconnect layers may be performed to cover the exposed electrolyte layer, which

5 would have the beneficial result of creating a seal.--

Please insert the following paragraph beginning on page 14, after line 25 and before page 14, line 26:

--In the five layer unit (20) of Figure 2, interconnect layer (70A) interfaces with the anode (40) at the first anode face (40A) except where manifolds (80) are formed.

10 Interconnect layer (70B) interfaces with the cathode layer (60) over cathode face (60B) and cathode edge (60C) except where manifolds (80) are formed. Interconnect layer (70B) also interfaces with electrolyte layer (50) at the second portion of electrolyte face (50C), as shown, except where manifolds (80) are formed (i.e., manifolds (80) may cross the interface between interconnect layer (70B) and the second portion of electrolyte face

15 (50C) at locations out of the plane of Figure 2). --

Please amend the paragraph beginning on page 14, line 31 and ending on page 15, line 6 as follows:

--Figure 3 (Fig. 3) depicts the preferred method of the present invention. The first stage of the method of the present invention is to fabricate the trilayer core (10). This

20 fabrication may comprise several sub-steps. In the substep (100) an anode layer may be formed. Next, an electrolyte layer may be deposited on the anode layer (200). Finally, a cathode layer may be deposited on the electrolyte layer (300). With a trilayer core complete interconnect layers may be deposited (400) on either side of the trilayer core (10) to form a five layer unit (400)(600) utilizing, for example, removable cores or

25 shaped forms. Additionally, one may bond multiple five layer units together to form a fuel cell stack (500). --

Please amend the paragraph beginning on page 15, line 6 and ending on page 15, line 9 as follows:

--Figures 4, 5a, 5b, and 5c are varying views of a preferred embodiment of the present invention. Consistent with Figure 2, these figures depict the anode layer (40),
5 electrolyte layer (50), cathode layer (60), and interconnect layers (70) which are
interconnect layer (70A) and interconnect layer (70B). Additionally, theses figures depict
a specific example of the use of channels and manifolds (80). --